

**REMARKS**

Claims 1-7 stand rejected under the judicially created doctrine of obviousness-type double patenting over U.S. Patent No. 6,620,345. In order to obviate this rejection, a terminal disclaimer is attached hereto. Accordingly, it is respectfully requested that the double-patenting rejection be withdrawn.

Claims 1-7 stand rejected under 35 U.S.C. § 102/103 over Gallagher et al. ('622). This rejection is respectfully traversed for the following reasons.

The Examiner asserts that Gallagher et al. is anticipatory and "[i]n the event that any minor modifications are necessary to meet the claimed limitations ... such modifications are well within the purview of the skilled artisan." It is respectfully submitted that the Examiner's assertions are improper with respect to both anticipation and obviousness. As a preliminary matter, it is not clear which claims are being rejected under § 102 and which claims are being rejected under § 103. Further, with respect to the § 103 rejection, the Examiner has made no statements indicating the differences between the claims and prior art nor provided the requisite motivation/rationale based on objective evidence from the prior art which suggests the desirability of making any modifications. As the Examiner cited, a patentability determination under § 103 requires the factual inquiries set forth in *Graham v. Deere* to be applied. In the instant case, no such analysis has been made.

It is respectfully submitted that the Examiner has failed to support either a *prima facie* case of anticipation or a *prima facie* case of obviousness. In imposing a rejection under 35 U.S.C. §102, the Examiner is required to point to "page and line" wherein an applied reference is perceived to identically disclose each feature of a claimed invention.

*In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). The Examiner has not pointed out precisely where each limitation of each claim (including the dependent claims) is disclosed in Gallagher et al..

Further, with respect to § 103, the Examiner simply alleges that any differences between the claims and the prior art would be within the purview of the skilled artisan. However, the Examiner has not supported this assertion with any prior art. The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested *by the prior art*. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, with respect to the § 103 rejection, the Examiner has not provided any *prior art* that allegedly discloses the limitations recited in claims 1-7. For example, the Examiner does not identify where Gallagher et al. discloses the "chelating agent" recited in claim 3, etc..

Further, with respect to the allegation that any minor modifications to meet the claimed limitations would be within the purview of the skilled artisan, the Examiner is directed to MPEP § 2143.01 under the subsection entitled "Fact that References Can Be Modified is Not Sufficient to Establish *Prima Facie* Obviousness", which sets forth the applicable standard:

The mere fact that references can be modified does not render the resultant combination obvious unless the *prior art* also suggests the desirability of the combination. (*In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990)).

In the instant case, even assuming *arguendo* that Gallagher et al. can be modified, it is submitted that the "mere fact that [Gallagher et al.] can be modified ... does not render the resultant modification obvious" because nowhere does the *prior art* "suggest the desirability of the modification" as required. Accordingly, it is respectfully submitted that the Examiner's assertion that any "minor" modifications to meet the claimed limitations are within the purview of the skilled artisan is irrelevant to the determination of patentability under § 103. That is, the prior art has to suggest the desirability of the modification rather than simply be capable of making the modification.

Turning to claim 1, it is submitted that Gallagher et al. neither anticipates, nor renders obvious, the adhesive agent recited therein. Claim 1 recites in pertinent part, "an elution preventing film-forming agent." The Examiner relies on the "protected curing agent" of Gallagher et al. as meeting each of the claimed limitations regarding "elution preventing film-forming agent."

However, it is respectfully submitted that the Examiner has not established *how* the curing agent "becomes reactive after electric continuity through said conductive particle appeared in the conductive adhesive agent when said binder resin is being hardened, to thereby form an elution preventing film on a surface of said conductive particle" as recited in claim 1. Instead, Gallagher et al. discloses that the curing agent "becomes reactive only at or near the time that the solder powder melts" (*see* col. 8, lines 30-31). It is respectfully submitted that the *melting* temperature of the *solder* powder is unrelated to electric continuity through a conductive particle when the *binder resin* is being *hardened*.

Although Gallagher et al. appears to disclose a curing agent whose reactivity is temperature-dependent in relation to the solder melting temperature, Gallagher et al. does not disclose or suggest a temperature dependency in relation to the hardening of the binder resin. It is noted that the reactivity of the curing agent of Gallagher et al. is related to when the solder *melts* whereas the reactivity of the elution preventing film-forming agent is related to when the binder *hardens*, so as to define different parameters by which the timing of the reactivity for the respective agents is controlled.

In fact, as described on page 2, line 5 of Applicants' specification, the melting temperature of solder is about 240°C so as to define the reactive temperature of the curing agent of Gallagher et al.; whereas in one exemplary embodiment of the present invention, the reactive temperature of the elution preventing film-forming agent is about 143°C when used with an adhesive agent having a hardening temperature of about 150°C (*see* page 23, lines 5-9 of Applicants' specification).

Furthermore, to the extent the Examiner relies on the "reacted" curing agent of Gallagher et al. as the "elution preventing film", Gallagher et al. is completely silent as to forming a film "on a surface of said conductive particle" as recited in claim 1. In contrast, as noted at col. 8, lines 27-28, the curing agent functions only to flux the metal powder (i.e. promote fusion between metal particles) and cross-link the *resin*. Accordingly, the functional operation of the curing agent after it becomes reactive is not related to forming an "elution preventing film on a surface of said conductive particle" as done by the elution preventing film-forming agent of the present invention.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be

established by probabilities or possibilities"; *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the foregoing, it is submitted that *Gallagher et al.* does not anticipate claim 1, nor any claim dependent thereon.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that claims 2-7 dependent thereon are also patentable. In addition, it is respectfully submitted that claims 2-7 are patentable based on their own merits by adding novel and non-obvious features to the combination (as noted above, the Examiner has not established a *prima facie* case of anticipation/obviousness of the pending claims).

Based on all the foregoing, it is submitted that claims 1-7 are patentable over *Gallagher et al.*. Accordingly, it is respectfully requested that the rejection of claims 1-7 under 35 U.S.C. § 102/103 over *Gallagher et al.*, be withdrawn.

### CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.